

Remarks

The above Amendments and these Remarks are in reply to the Advisory Action mailed March 27, 2008. Claims 1-12, 14-20, 22 and 23 were pending in the Application prior to the outstanding Office Action. In the Office Action, the Examiner rejected claims 1-12, 14-20, 22 and 23. Reconsideration of the rejections is requested.

Prosecution History and Claim Rejections under 35 USC §102

The currently pending claims are twice rejected, but the scope of claims 1, 14 and 22 have not been narrowed or broadened from the scope of the claims as originally presented to the Examiner. In the first Office Action dated July 5, 2007 and Final Office Actions dated December 7, 2007 the Examiner summarizes components of prior art reference *Bloemers* (U.S. Patent No. 4,480,605) but does not explain what components anticipate the various elements of the claims. Applicant argued and again submits that the components do not anticipate all of the elements of claims 1, 14 and 22. To put it plainly, *Bloemers* does not teach “an input cable” **AND** “an output cable” (at the very least).

Applicant submits that the Examiner has yet to meet the burden of 35 U.S.C. 102(b). Referring to MPEP 2131, the burden is encapsulated as:

TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT
OF THE CLAIM

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Applicant argued in the REPLY A to first Office Action mailed Oct. 5, 2007 that the Examiner failed to meet this burden because *Bloemers* ‘605 failed to teach each and every element. In the Office Action the Examiner did not respond directly to this assertion. Applicant reasserts previously submitted arguments under the belief that they have not been thoroughly considered. It has not been clear from any of the Office Actions how the Examiner feels the elements have been found.

Apart from any belief of the patentability of the claims as they stand, the Applicant cannot ascertain what the ultimate scope of any claims may be because the Examiner has not presented art that would cause the Applicant to reconsider the scope of the claims, or identify in what way the scope should be reconsidered. The Applicant is rudderless without a proper demonstration of the relevant art.

The Applicant presents the following listing of claims to crystallize the disconnect that the Applicant believes exists between the Examiner's understanding of the claims and the Applicant's understanding of the claims.

The Claims

Figures 4 and 5 are shown below. Claims are presented with reference numerals from Figures 4 and 5 to assist in understanding the elements of the claims. Figures 4 and 5 are merely one embodiment and the Applicant does not intend to narrow the scope of the claims by including the reference numerals.

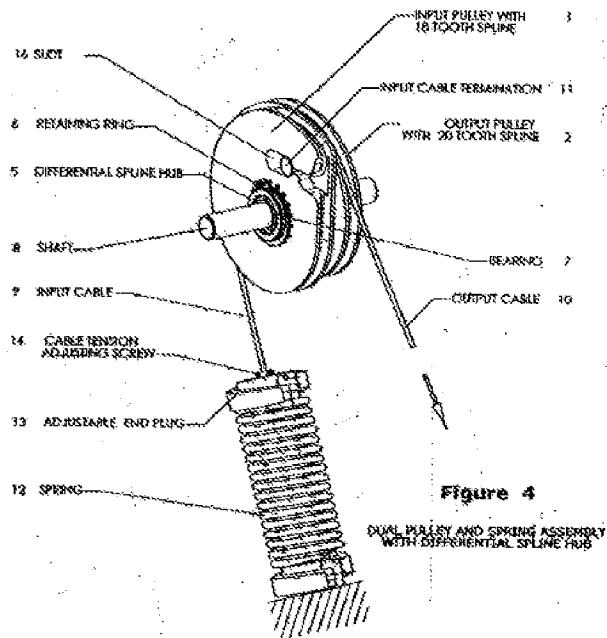


Figure 4

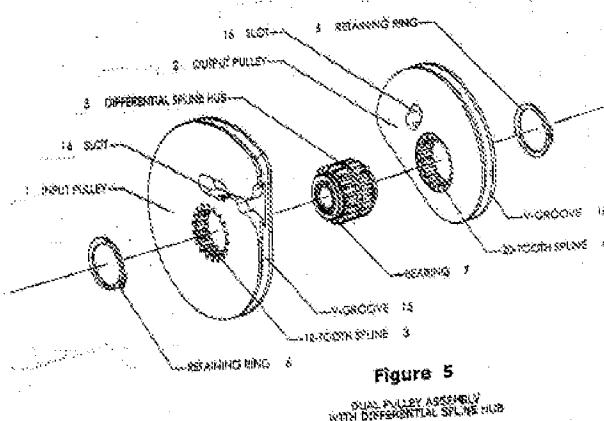


Figure 5

1. A mechanism that can maintain a constant force comprising:
an input groove (15 of 1);
an output groove (15 of 2);
said input groove operably coupled to said output groove;
an input cable (9) secured to said input groove;
an output cable (10) secured to said output groove;
said input cable (9) adapted to be secured to a source of force (12); and
said output cable (10) adapted to output a constant force.

14. A mechanism that can maintain a constant force comprising:
an input groove (15 of 1);
an output groove (15 of 2);
said input groove operably coupled to said output groove; and
wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner and said input groove is operably coupled to a back of said output groove.

22. A mechanism that can maintain a constant force comprising:
a pulley (1+2) including an input groove (15 of 1) and an output groove (15 of 2);
an input cable (9) having a first end coupled to the input groove and a second end connected with a spring (12);
an output cable (10) having a first end coupled to the output groove; and a second end extending from the first end;
wherein the pulley (1+2) is adapted to transfer a constant force to the second end of the output cable; and
wherein the input groove and the output groove are shaped according to a characteristic of the spring (12).

Figure 6 is shown below. Claim 17 is presented with reference numerals from Figure 6 to assist in understanding the elements of the claims. Figure 6 is merely one embodiment and the Applicant does not intend to narrow the scope of the claims by including the reference numerals.

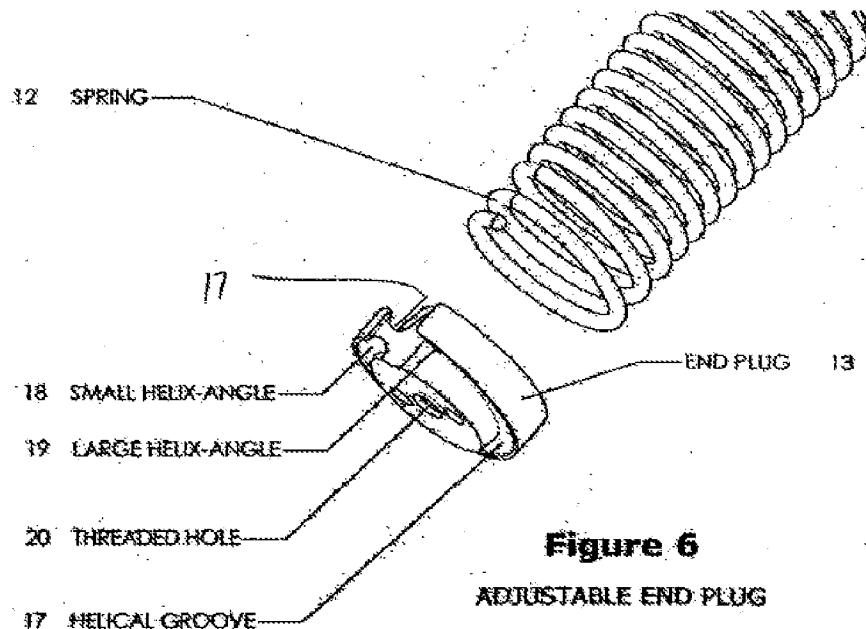


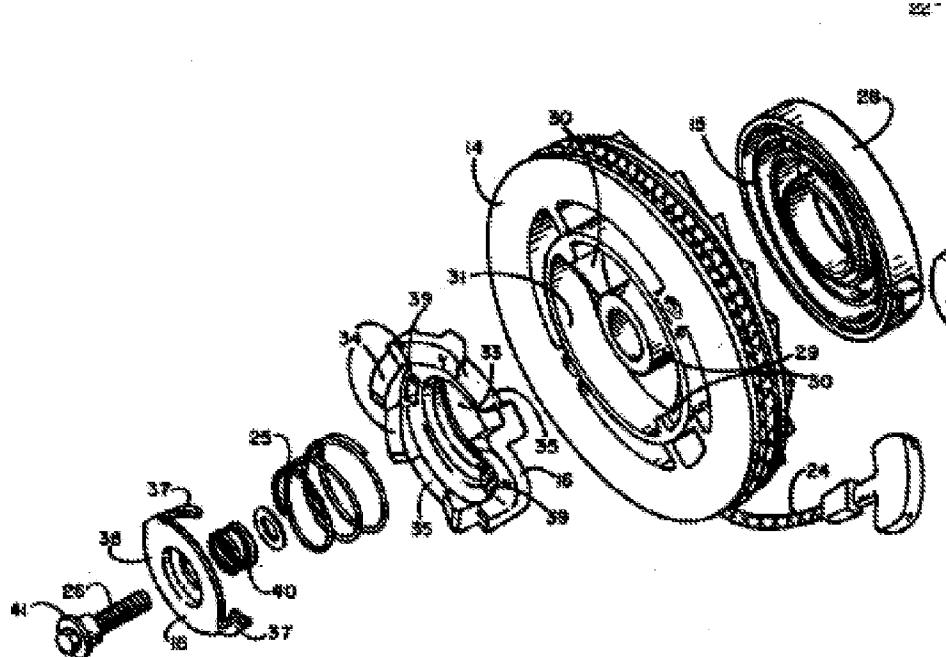
Figure 6

ADJUSTABLE END PLUG

17. A spring end plug comprising:
a plug (13);
a thread (17) described on said plug (13);
a spring (12)
said plug adapted to be mounted onto a spring with said thread adapted to be screwed on to the spring;
and
a mechanism (20 – in the embodiment shown is connectable to a cable) that is adapted to allow a load to be applied through the plug (13).
wherein a counter force applied by the spring in response to the load is adjustable by repositioning the plug along the spring.

The Bloemers reference

Figure 2 of *Bloemers* is shown below. The claims are repeated along with reference numerals from Figure 2 based on the Applicant's broadest understanding of the Examiner's rejection. Applicant is not admitting that the referenced components in fact do anticipate the elements as they are labeled. Labels are provided merely as an attempt to illustrate the Applicant's assertion that not all of the elements are met.



1. A mechanism that can maintain a constant force comprising:
an input groove (**missing**);
an output groove (14);
said input groove operably coupled to said output groove;
an input cable (**missing**) secured to said input groove;
an output cable (24) secured to said output groove;
said input cable (**missing**) adapted to be secured to a source of force (28); and
said output cable (24) adapted to output a constant force.

14. A mechanism that can maintain a constant force comprising:
an input groove (**missing**);
an output groove (14);
said input groove operably coupled to said output groove; and
wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner and said input groove is operably coupled to a back of said output groove (**missing**).

17. A spring end plug comprising:
a plug (38);
a thread described on said plug (38);
a spring (28)
said plug (38) adapted to be mounted onto a spring (28) with said thread adapted to be screwed on to the spring (**missing**); and
a mechanism (30) that is adapted to allow a load to be applied through the plug (38).
wherein a counter force applied by the spring in response to the load is adjustable by repositioning the plug along the spring (**missing**).

22. A mechanism that can maintain a constant force comprising:
a pulley (14) including an input groove (**missing**) and an output groove (14);
an input cable (**missing**) having a first end coupled to the input groove (**missing**) and a second end connected with a spring (28);
an output cable (24) having a first end coupled to the output groove (14); and a second end extending from the first end;
wherein the pulley (14) is adapted to transfer a constant force to the second end of the output cable (24);
and
wherein the input groove (**missing**) and the output groove are shaped according to a characteristic of the spring (28).

Arguments to Claim Rejections under 35 USC §102 as Submitted on March 7, 2008

The Applicant resubmits the following arguments so that they may be given proper consideration.
The arguments may be helpfully viewed in light of the claim listings immediately preceding this section.

Claims 1-12, 14-20, 22 and 23 stand rejected under 35 U.S.C. 102(b) as being anticipated by *Bloemers* (U.S. Patent No. 4,480,605). Applicant respectfully traverses the rejection.

The Examiner maintains the rejection of all independent claims (1, 14, 17 and 22), but the 35 USC 102 rejection provided in the Office Action appears to only directly describe elements recited in claim 1. Further, the Response to Arguments section gives no clue as to the reason for maintaining rejection over claims 2-23.

1. Claims 1 and 22

In the Response to Arguments, the Examiner writes:

“Applicant argues that *Bloemers* fails to disclose that the input cable is adapted to be secured to a source of force. The language ‘adapted to be’ is not a positive recitation and the reference can in fact be adapted to be secured to a source of force...”

The Examiner still has not identified the “input cable” in the *Bloemers* reference. *Bloemers* describes a rope (24) which is wound around a groove in the pulley. It is thought by the Applicant that the Examiner

cites the rope (24) as anticipating an output cable. However, claim 1 cites 2 distinct elements: “an output cable adapted to be secured to a source of force” and “an input cable adapted to output a constant force” and claim 22 cites 2 distinct elements: “an input cable having a first end coupled to the input groove and a second end connected with a spring; an output cable having a first end coupled to the output groove; and a second end extending from the first end.” The spring (25) of *Bloemers* cannot anticipate a cable. The definitions for “cable” as a noun found at dictionary.com (as of the filing of this response) include:

1. a heavy, strong rope.
2. a very strong rope made of strands of metal wire, as used to support cable cars or suspension bridges.
3. a cord of metal wire used to operate or pull a mechanism.
4. Nautical.
 - a. a thick hawser made of rope, strands of metal wire, or chain.
 - b. cable's length.

A spring does not fall under the definitions of “cable.” Because *Bloemer* recites one cable (whether assigned by the Examiner as an input or output cable), *Bloemer* fails to anticipate claims 1 and 22.

As stated, *Bloemers* teaches a recoil spring 15 held within a spring retainer 28 and applying recoil force between a post 20 of the housing 13 and a starter pulley 30. **However, the recoil spring 15 applies force directly to the pulley, rather than to an input cable.** The starter pulley 14 transfers the force directly to the output cable 24. Nowhere does *Bloemers* teach or suggest an input cable adapted to a source of force. Because *Bloemers* fails disclose all of the limitations of claim 1, *Bloemers* cannot anticipate claims 1 and 22 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claims 1 and 22.

2. Claim 2

Claim 2 stands rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a mechanism “wherein said input groove spirals outwardly in a direction that is opposite to a direction that said output groove spirals outwardly” as recited in claim 2. Referring to Figure 8 of the present application, for example only to more clearly discuss the limitations, an input pulley 21 and an output pulley 22 are shown joinable via a hub 25 and retainer rings 6 so that “said input groove [is] operably coupled to said output groove.” As can be seen, the groove of each pulley spirals outwardly in a direction that is opposite to a direction of the other groove.

In contrast, in FIGS. 1-3, *Bloemers* only shows a starter pulley 14 having a single non-spiraling groove around which the output cable 24 is wrapped. Because *Bloemers* fails to disclose all of the limitations of claim

2, *Bloemers* cannot anticipate claim 2 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claim 2.

3. Claim 3

Claim 3 stands rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a mechanism “wherein said input groove and said output groove are positioned back-to-back” as recited in claim 3. Referring to Figure 8 of the present application, for example only to more clearly discuss the limitations, an input pulley 21 and an output pulley 22 are shown joinable via a hub 25 and retainer rings 6 so that “said input groove [is] operably coupled to said output groove.” As can be seen, the input groove and output groove are positioned back-to-back.

In contrast, in FIGS. 1-3, *Bloemers* only shows a starter pulley 14 having a single groove around which the output cable 24 is wrapped. Because *Bloemers* fails disclose all of the limitations of claim 3, *Bloemers* cannot anticipate claim 3 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claim 3.

4. Claims 4 and 7

Claim 4 stands rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a mechanism “wherein said input groove spirals outwardly with an ever increasing radius and the output groove spirals outwardly with an ever increasing radius” as recited in claim 4 or a mechanism “wherein said input groove spirals outwardly, in a manner such that said output cable produces a constant output force” as recited in claim 7. Referring to Figure 8 of the present application, for example only to more clearly discuss the limitations, an input pulley 21 and an output pulley 22 are shown joinable via a hub 25 and retainer rings 6 so that “said input groove [is] operably coupled to said output groove.” As can be seen, the input groove and output groove spiral outwardly with ever increasing radius.

In contrast, in FIGS. 1-3, *Bloemers* only shows a starter pulley 14 having a single, non-spiraling groove around which the output cable 24 is wrapped. Because *Bloemers* fails to disclose all of the limitations of claims 4 and 7 *Bloemers* cannot anticipate claims 4 and 7 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claims 4 and 7.

5. Claims 5 and 6

Claims 5 and 6 stand rejected on the same basis as claim 1. However, claims 5 and 6 are allowable at least for the reasons give for allowance of claim 1. Because *Bloemers* fails to disclose all of the limitations of claims 5 and 6, *Bloemers* cannot anticipate claims 5 and 6 under 35 U.S.C. 102(b). Applicant therefore

respectfully requests withdrawal of the rejection of claims 5 and 6.

6. Claim 8

Claim 8 stands rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a mechanism “in combination with a linear extension spring to provide a source of force” as recited in claim 8. Referring to FIGS. 3a-4 of the present application, for example only to more clearly discuss the limitations, an input cable (9) is shown secured to a spring (12) which acts as a source of force. The input cable transfers the force to the output cable (10) by way of the input pulley (1) and output pulley (2).

Bloemers discloses two compression springs 25,40 and a coil spring 15, but fails to disclose an extension spring, as recited in claim 8. Because *Bloemers* fails to disclose all of the limitations of claim 8, *Bloemers* cannot anticipate claim 8 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claim 8.

7. Claims 9-13

Claims 9-13 stand rejected on the same basis as claim 1. However, claims 9-13 are allowable at least for any of the reasons given for allowance of claims 1, 2, and 4-7. Because *Bloemers* fails to disclose all of the limitations of claims 9-13, *Bloemers* cannot anticipate claims 9-13 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claims 9-13.

8. Claims 14-16

Claims 14-16 stand rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a mechanism “wherein said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner and said input groove is operably coupled to a back of said output groove” as recited in claim 14. Referring to Figure 8 of the present application, for example only to more clearly discuss the limitations, an input pulley 21 and an output pulley 22 are shown joinable via a hub 25 and retainer rings 6 so that “said input groove is operably coupled to a back of said output groove.” As can be seen, said input groove spirals outwardly in a counter-clockwise manner and said output groove spirals outwardly in a clockwise manner.

In contrast, in FIGS. 1-3, *Bloemers* only shows a starter pulley 14 having a single non-spiraling groove around which the output cable 24 is wrapped. Because *Bloemers* fails to disclose all of the limitations of claims 14-16, *Bloemers* cannot anticipate claims 14-16 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claims 14-16.

9. Claims 17-20

Claims 17-20 stand rejected on the same basis as claim 1. However, nowhere does *Bloemers* disclose a spring end plug comprising a plug “adapted to be mounted onto a spring with said thread adapted to be screwed on to the spring... wherein a counter force applied by the spring in response to the load is adjustable by repositioning the plug along the spring” As recited in claim 17. Referring to Figure 6 of the present application, for example only to more clearly discuss the limitations, an end plug 13 is shown in an exploded view with an extension spring 12. As can be seen, the end plug has a helical groove 17 that allows the end plug to be threaded along the spring 12 by way of the coils of the spring received within the groove.

In contrast, in FIGS. 1-3, the Examiner writes that the pulley 14 has a cap 38. If reference number 38 (described as a disk) is a cap, it includes arms 37 that are inserted into slots 39 in a drive plate 16. The disk 38 cannot be “screwed on to the spring” as recited in claim 17. On the contrary, the disk 38 is held against the spring in compression by a rim 41 of a screw 26. Because *Bloemers* fails to disclose all of the limitations of claims 17-20, *Bloemers* cannot anticipate claims 17-20 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claims 17-20.

10. Claim 23

Claim 23 stands rejected on the same basis as claim 22. Dependent claims have at least the features of the independent claim from which they depend. Because *Bloemers* fails to disclose all of the limitations of claim 22, *Bloemers* cannot anticipate claims 23 under 35 U.S.C. 102(b). Applicant therefore respectfully requests withdrawal of the rejection of claim 23.

Request for Interview

MPEP 713.01 allows interviews where “the application is a continuing or substitute application or the examiner determines that such an interview would advance prosecution of the application.” It also states that “The examiner may require that an interview be scheduled in advance.”

Applicant requests that once the Examiner has had an opportunity to review the arguments that he request that the Applicant schedule an interview so that the Applicant can further help cut to the heart of the opposing arguments.

Conclusion

In light of the above, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

Enclosed is a Petition for Extension of Time under 37 C.F.R. § 1.136 for extending the time to respond up to and including April 7, 2008.

If fees other than those submitted herewith are found to be due, the Commissioner is authorized to charge any underpayment or to credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: April 7, 2008

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